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ST.N - Q3 2019 Sensata Technologies Holding PLC Earnings Call

EVENT DATE/TIME: OCTOBER 30, 2019 / 12:00PM GMT

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PRESENTATION

Operator

Good day, and welcome to the Sensata Technologies Q3 2019 Earnings Call. (Operator Instructions) Please note, this event is being recorded.

I would like to turn the conference over to Mr. Joshua Young, Vice President, Investor Relations. Please go ahead.

Joshua S. Young - *Sensata Technologies Holding plc - VP of IR*

Thank you, Francesca, and good morning, everybody. I'd like to welcome you to Sensata's Third Quarter 2019 Earnings Conference Call. Joining me on today's call are Martha Sullivan, Sensata's CEO; Jeff Cote, Sensata's President and Chief Operating Officer; and Paul Vasington, Sensata's Chief Financial Officer. In addition to the earnings release we issued earlier today, we will be referencing a slide presentation during today's call. The PDF of this presentation can be downloaded from Sensata's Investor Relations website. We will post a replay of today's webcast shortly after the conclusion of today's call.

Before we begin, I'd like to reference Sensata's safe harbor statement on Slide #2. During the course of this conference call, we will make forward-looking statements regarding future events or the financial performance of the company that involve risks and uncertainties. The company's actual results may differ materially from the projections described in such statements. Factors that might cause such differences include, but are not limited to, those discussed in our Forms 10-Q and 10-K as well as other subsequent SEC filings.

On Slide #3, we show Sensata's GAAP results for the third quarter of 2019. We encourage you to review our GAAP financial statements in addition to today's presentation. Most of the subsequent information that we will discuss during today's call will be related to non-GAAP financial measures. Reconciliations of our GAAP to non-GAAP financial measures are included in our earnings release and in our webcast presentation. The company provides details of its segment operating income on Slides 15 and 16, which are the primary measures management uses to evaluate the business.

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Martha will begin today's call with an overall business summary; and Jeff will then provide more details on our investments in our Smart & Connected initiative; and Paul will then cover our financials for the third quarter 2019 and provide guidance for the fourth quarter as well as update full year 2019 guidance. We will then take your questions after our prepared remarks.

Now I'd like to turn the call over to Sensata's CEO, Martha Sullivan.

Martha N. Sullivan - *Sensata Technologies Holding plc - CEO & Executive Director*

Thank you, Joshua, and thanks to everyone on the call for joining us this morning. We continued to effectively manage our operations in the third quarter and generated solid margins, EPS and free cash flow despite facing meaningful end market decline, particularly in our industrial and HVOR businesses as well as unfavorable movements in foreign currency.

On Slide 4, I list some of the key highlights of the third quarter. For the third quarter, we reported revenues of $849.7 million, which represented an organic revenue decline of 2.8%. We adjusted -- we delivered adjusted EPS of $0.90, which was ahead of our guidance midpoint after accounting for unfavorable movement of foreign currency relative to our guidance.

We continued to outgrow our end markets, posting outgrowth of 140 basis points in auto and 160 basis points in HVOR. While our level of outgrowth relative to end market production slowed from Q2 '19, much of this is related to launch delays from HVOR customers as they work to reduce their inventories in response to lower demand.

We generated adjusted operating margins of 23.5% in the third quarter, which was 30 basis points higher than our guidance, despite generating approximately $9 million of lower-than-expected revenue. This reflects the operating discipline we have in the business. We are focused on quickly driving expense and productivity initiatives in order to align our costs with lower revenue.

Our adjusted EPS of $0.90 reflected a tailwind from foreign currency of $0.04, which was $0.03 lower than our expected tailwind of $0.07 to $0.08, primarily due to the weakening of the Chinese renminbi. After adjusting for this effect, our EPS was approximately $0.03 better than the midpoint of the guidance we provided for the third quarter of 2019.

We continue to make important long-term investments for our future growth. Jeff will talk later in the call about investments in our Smart & Connected initiative and how we believe this solution will bring significant value for commercial truck and trailer OEMs as well as fleet managers.

Finally, our free cash flow grew 15% year-over-year, totaling $140 million, which was 97% of our adjusted net income in the quarter. This represented a significantly higher conversion rate than we have posted in recent quarters as a result of better working capital efficiency.

Slide 4 shows organic revenue performance by end market in the third quarter. I will begin with auto, which posted an organic revenue decline of 40 basis points in the quarter. This was 140 basis points above an end market decline of 1.8% in the third quarter. For the full year 2019, we expect our automotive business to outgrow its end market by approximately 500 basis points.

We generated solid organic revenue growth in our China auto business during the third quarter, which was a significant sequential improvement from the second quarter of 2019. Most of this improvement was driven by the China auto end market, which declined 5% in the quarter compared to a 20% decline last quarter. We continue to sustain robust double-digit content growth in China.

Our North American auto business generated organic revenue growth in the quarter, but was adversely affected by the GM strike. We estimate that the GM strike represented a 1% revenue headwind for the auto business in Q3 and will be a 3% revenue headwind for our overall auto business in the fourth quarter. In Europe, we continued to be affected by a volatile end market, primarily as a result of a general market decline.

Next, our HVOR business posted an organic revenue decline of 6.2%, which was 160 basis points above a 7.8% end market decline during the third quarter. We experienced considerable end market declines for both the on- and off-road portions of the HVOR business. Large construction and ag customers announced multi-quarter efforts to reduce their inventories because of falling demand. We are seeing a similar trend of inventory

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reductions and weaker end market demand from our on-road customers in North America and Europe, while our China on-road business continues to post healthy growth as a result of strong content performance. A number of our off-road HVOR customers are pushing out planned product launches by as much as 9 to 12 months as they continue to work down their equipment inventories. These delays have lowered our overall level of outgrowth relative to end market production.

Finally, I turn to our aerospace, industrial and other end markets, which are served by our Sensing Solutions segment. For the third quarter of 2019, we posted a 6.3% organic revenue decline in this business as global industrial demand weakened. Weak PMI in all geographic regions is signaling continued demand contraction, and our customers are lowering inventory and slowing production. Our industrial performance in China is particularly weak as a result of global tariff and trade actions. Our HVAC end market continued to see declines, due in part to a slowdown in the production of refrigerated trucks. The strongest performance in Sensing Solutions continues to be our aerospace business, which is posting content growth on top of an expanding end market. We are poised to generate high single-digit organic growth in our aerospace business for the full year.

Turning to Slide 6. I show some of the specifics of our end market outlook for the fourth quarter of 2019 compared to our previous assumption. We expect our end markets to become incrementally weaker in the fourth quarter and we expect our customers to continue to lower their inventories through the end of the year. One of the primary drivers of this lower revenue outlook is the negative effect of the GM strike, which will reduce our North American auto performance. We expect the North American auto end market will be down 12% to 13% in the fourth quarter of 2019, primarily due to the effects of the GM strike. This is significantly weaker than the low single-digit decline we previously expected in North America auto. We are also lowering end market expectations for the European auto, HVOR and industrial end markets for the fourth quarter. As a result, we are forecasting $830 million of revenue in the fourth quarter, at the midpoint of our guidance, which is approximately $50 million less than what we previously expected. This lower outgrowth is largely driven by weaker market demand and unfavorable changes in foreign exchange.

Before turning the call over to Jeff, I want to close with a few key messages that I show on Slide 7. We have a long history of generating solid levels of margins, earnings and cash flows during many types of end market environments, including periods of more meaningful end market declines. And you saw the strong operating discipline reflected in our third quarter results as we quickly aligned our cost with customer demand to produce solid margin and EPS despite reporting lower-than-expected revenue.

In the past 5 years, we experienced periods of difficult end market environments, but still managed to deliver a 5-year adjusted EPS CAGR of 8%. We've done a lot of work to strengthen our balance sheet over the past few years and our net leverage ratio of 2.8x is at the low end of our historic range, which should be reassuring for our investors. Our business model generates a lot of free cash flow, which gives us a much better cash flow profile than most of our peers serving the auto and industrial markets. So we are less susceptible to major swings in demand.

I'd also point out that our stronger balance sheet has occurred even as we have deployed more than $900 million towards M&A and share repurchases over the past 18 months. We continue to have a balanced returns-driven approach to capital deployment. We continually evaluate opportunities to put capital to work in M&A, share repurchases and other investments alongside our focus to sustain a healthy leverage ratio. This is what enables us to accelerate our investments and initiatives such as Electrification and Smart & Connected in order to drive future growth.

In the face of weakening end markets and other external pressures, our historically low net leverage ratio and higher pace of returning cash to shareholders speaks to the strength of our organization. This results from the effectiveness of our operating strategy to outgrow our end markets, to continually improve our operating performance, to invest in our future growth and to deliver sustained shareholder value.

I'd like to now turn the call over to Jeff to talk more about our Smart & Connected initiative. Jeff?

Jeffrey J. Cote - *Sensata Technologies Holding plc - President & COO*

Thank you, Martha. It is a pleasure to join you today. I'm going to talk in detail about the investments we are making in our Smart & Connected initiative and the value this solution brings to our customers. We believe that this initiative is one of our most strategic growth investments and has the potential to establish a new customer segment for Sensata, while further strengthening our relationships with truck and trailer OEMs as well as Tier 1 system partners.

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On Slide 9, I show an overview of the broad portfolio of Sensata sensors that are deployed on trailers and on-road trucks today. We're a clear industry leader, providing sensors for everything from drivetrain and suspension systems to trailer and cabin comfort applications. We have a strong brand with blue chip customers and we have a track record of success.

Since 2017, our HVOR business has averaged 11% organic growth while outgrowing its end markets by nearly 700 basis points.

One of the areas where we have a leadership position is in wireless sensing, specifically around tire pressure monitoring. As legislation requires OEMs to include TPMS on new trucks and trailers, our OEM customers will be leveraging our capabilities to significantly expand the data they are capturing on their vehicles and trailers beyond just tire pressure, using our vehicle area network solution.

We quickly recognized that this type of solution could also bring tremendous value directly to fleet managers, a growing and less cyclical part of the overall logistics value chain. While we believe the total available market for our solution sold into truck and trailer OEMs today is around $1 billion, the potential market for fleet managers is nearly 6x larger. Today, there are almost 80 million commercial trucks and trailers in North America and Europe alone that could be retrofit with our solution.

While many fleet managers are currently using telematics solutions, they have a desire to capture valuable data that can only be delivered through high-performing sensors and embedded software algorithms in areas such as brakes, weight, wheel ends and other applications.

Consequently, our market and technology leadership in TPMS is creating an important new opportunity for us to broaden our value proposition and evolve into a more strategic data insight partner for both OEMs and fleet managers.

On Slide 10, I show the Sensata vehicle area network, which consists of high-performing sensors developed by Sensata and those provided by third parties. A wireless gateway device to collect and process the data and a high-bandwidth wireless truck-to-trailer link to ensure that data between the truck and the trailer is exchanged seamlessly. Sensata is uniquely positioned to deliver on this opportunity because we understand the sensors that generate the data as well as the vehicle applications and the productivity-enabling use cases.

The portfolio that we are developing for this market is generally categorized in 2 areas. One, mechanical condition and safety; and two, load and environmental monitoring. I show examples of sensor applications we are focused on for a trailer on the left-hand side of the slide and the prioritized sensor applications for a truck on the right-hand side of the slide. These sensor applications are brought together in the Sensata vehicle area network, which is a scalable platform that fuses data from various sensors to provide a one-stop shop for valuable vehicle and trailer information. This information ultimately leads to data insights that improves efficiency for all customers. Customers can choose to deploy the entire portfolio along with advanced embedded software features or elect to only deploy one of the applications. This makes it a highly customizable solution that can scale to customer-specific needs.

Each of the use cases has a compelling value proposition. For example, our weight sensors help fleet managers reduce scale fees, save driver yard and dock time and increase utilization. Our brake sensors decrease maintenance costs and roadside checks, to name a few of the benefits. These applications have a rapid and compelling payback for fleet managers.

We have already had a number of wins and proof points demonstrating the value of the solution, including the decision by a leading truck OEM to deploy our vehicle area network on all of their new trucks in North America. We have secured a multimillion dollar agreement with a leading trailer manufacturer to deploy our solution on their trailers in Europe. In the third quarter, we initiated engagements with many top U.S. fleet managers to evaluate our solution in live field tests.

And finally, we have significant pull from partners seeking to integrate with our solution. For example, we recently formed a partnership with Hendrickson, a leading suspension and axle manufacturer in the U.S., to power their wheel-end sensor using our vehicle area network. While it can take 3 to 4 years to see revenue once we close new opportunities with our typical OEM customers, we expect the time line to generate revenue with fleet customers will be much shorter, possibly as fast as 12 to 24 months from the time we close a new business win.

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On Slide 11, I show how the Sensata vehicle area network will feed a telematics ecosystem that is hungry for valuable sensor data. While we have simplified this slide, there is a lot of complexity in the telematics ecosystem that is required to capture data off the truck and trailer to bring it to the cloud for analytics. We expect to be an important partner for both on-road telematics hardware and cloud service providers that offer fleet management software solutions. We will integrate our solution with their onboard devices in order to pull data off the vehicle and into the cloud to facilitate valuable insights for fleet managers.

To ensure our offering is strong, we are investing to meet the requirements of OEMs and fleet managers. This investment began 2 years ago and we expect our spending to accelerate in the next 12 months. In 2020, we expect to double our investment on this initiative. This speaks to the tremendous potential that the initiative has to accelerate our long-term growth as well as unlock new opportunities in the broader logistics ecosystem.

On Slide 12, I depict how Sensata has evolved over the past 2 years and our aspiration to continue to evolve into a data insight partner for our OEM and fleet customers. This evolution has included moving from sensor design and development to onboard wireless systems such as TPMS, to an integrated vehicle area network solution. We are leveraging our differentiated position in sensor designs, our expertise in embedded and wireless systems, and our industry knowledge in analytics to broaden the value that we can bring to customers and move up the IoT stack. More to come on this very exciting opportunity in the coming quarters.

I'd now like to turn the call over to Paul to review our third quarter results in more detail and to provide guidance for the fourth quarter and full year 2019. Paul?

Paul S. Vasington - *Sensata Technologies Holding plc - CFO, CAO & Executive VP*

Thank you, Jeff. Key highlights for the third quarter, as shown on Slide 14, include: revenue of $849.7 million in the quarter, a decrease of 2.7% from the third quarter of 2018. Changes in foreign currency decreased revenues by 0.3%. The net effect of our valves divestiture and the acquisition of GIGAVAC increased revenues by 0.4% year-over-year. The net result was a 2.8% organic revenue decline in the quarter.

Adjusted operating income was $199.5 million in the quarter, a decrease of 3.9% compared to the third quarter of 2018, due primarily to lower revenue, productivity headwinds partially due to new product launches, and the net effect of acquisition and divestitures, somewhat offset by favorable currency. Adjusted net income was $144.6 million in the quarter, a decrease of 6.1% compared to the third quarter of 2018. Adjusted EPS was $0.90 in the third quarter, a decrease of 1.1% compared to the prior year quarter.

Now I'd like to comment on the performance of our 2 business segments in the third quarter of 2019. I will start with Performance Sensing on Slide 15. Our Performance Sensing business reported revenues of $628.6 million for the third quarter, a decrease of 3.2% compared to the same quarter last year, reflecting both the negative impact from foreign currency of 0.3% and the net effect of acquisitions and divestitures, which reduced revenue by 1.2%. Excluding these factors, Performance Sensing reported an organic revenue decline of 1.7% relative to the prior year.

Our automotive business reported an organic revenue decline of 0.4% in the third quarter, but outpaced the end market by 140 basis points. Organic revenue growth in China and North America was offset by an organic revenue decline in Europe. Our HVOR business reported an organic revenue decline of 6.2% in the third quarter, outpacing the end market by 160 basis points. End market decline, combined with lower content growth due to launch delays, drove most of the decline in HVOR revenues during the quarter.

Performance Sensing operating income was $165.1 million, a decrease of 7.5% as compared to the prior year. Performance Sensing profit as a percentage of revenue was 26.3% in the third quarter, a decline of 120 basis points on the same quarter last year. The decline in segment operating income and margin was primarily driven by the decline in organic revenues, productivity headwinds, partially due to the effect of scaling new product launches, and the net impact of acquisitions and divestitures. This was somewhat offset by the positive effect of foreign currency.

As shown on Slide 16, Sensing Solutions reported revenues of $221.1 million in the third quarter, a decrease of 1.3% as compared to the same quarter last year. On an organic basis, factoring in a negative impact from foreign currency of 0.6% and a positive contribution from the acquisition of GIGAVAC of 5.6%, we reported an organic revenue decline of 6.3%. The decline was driven by our industrial business as a result of lower end

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market demand and inventory reductions in major geographic regions. This was partially offset by organic revenue growth in our aerospace business as a result of content growth and a healthy end market.

Sensing Solutions operating income was $71 million in the third quarter, a decrease of 3.2% from the same quarter last year. The decline in operating income was primarily due to lower organic revenue, partially offset by the favorable impact of the acquisition of GIGAVAC. The decline in segment margin was primarily related to the dilutive impact of the GIGAVAC acquisition, where we are investing heavily in electrification.

Corporate and other costs, not included in segment operating income, were $47.6 million in the third quarter, roughly flat with the previous year. Excluding charges added back to our non-GAAP results, corporate and other costs were $34.2 million in the third quarter of 2019.

Slide 17 shows Sensata's third quarter 2019 non-GAAP results. Adjusted gross profit declined 5.1% year-over-year to $303 million and gross margins declined 90 basis points to 35.7%. The decline in gross profit and margin were primarily due to lower organic revenues and productivity headwinds related to scaling new product launches, partially offset by foreign currency tailwinds.

SG&A costs were $9.3 million favorable year-over-year due to lower variable compensation and selling costs as well as lower discretionary spending. As a result, adjusted operating income was down 3.9% compared to the prior year quarter.

Our tax rate, shown on this slide as a percent of adjusted profit before tax, was down 40 basis points year-over-year. We expect our full year tax rate to be approximately 8.5% to 9%, consistent with our previous guidance of 9%. Finally, adjusted EPS was down $0.01 or 1.1% as compared to the third quarter of 2018, as the decline in operating income was mostly offset by the benefit of share repurchases.

On Slide 18, I show the progress we have made on strengthening our balance sheet over the past few years. Since the end of 2015, we have lowered our net debt by $744 million and reduced our leverage ratio from 4.6x to 2.8x.

During the quarter, we enhanced our capital structure by issuing a new 10-year $450 million bond and refinancing our term loan. We achieved several positive outcomes from these financing actions. First, we took advantage of favorable markets and secured a 4.375% coupon on our bond financing. This historically low 10-year rate in the high-yield market reflects the attractiveness of our business as well as the confidence that bondholders have in our long-term operating performance. In addition, we increased the percentage of our fixed rate debt from 72% to 86% of our total debt to further reduce interest rate volatility. Also, with this bond financing, we extended the duration of our debt portfolio. Finally, we reduced the total amount of our term loan and extended the maturity to 2026. As a result, we have no debt maturities before 2023.

On Slide 19, I show our financial guidance for the fourth quarter of 2019. Overall, we expect to report revenues between $818 million and $842 million, representing a reported revenue decline between 1% and 3%.

At the midpoint of our guidance, we expect that foreign currency will decrease revenues year-over-year by approximately $6 million in the fourth quarter of 2019. And the net effect of acquisitions and divestitures will increase net revenues by approximately $9 million.

Excluding the impact of foreign currency and the net effect of acquisitions and divestitures, we expect to report an organic revenue decline of 1% to 4% in the fourth quarter. Our current bill rate is approximately 88% of the revenue guidance midpoint for the fourth quarter. We expect to report adjusted operating income between $186 million and $192 million.

On the bottom line, we expect to report adjusted net income between $135 million and $141 million, which would represent a decline of 12% at the midpoint of our guidance. We expect to report adjusted EPS between $0.85 and $0.89. This earnings performance is down sequentially from the third quarter of 2019, due primarily to lower revenues, mainly from weaker end markets, higher investment in new growth programs and the timing of employee compensation expenses.

Now let me turn to our guidance for the full year 2019, as shown on Slide 20. Our updated guidance for full year 2019 now anticipates the lower end market outlook that we shared earlier with you on the call. As a result, we expect revenue between $3.422 billion to $3.446 billion for the full

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year 2019, representing a decline between 2% and 3%. We expect foreign currency to decrease revenues by approximately $29 million and the net effect of acquisitions and divestitures will reduce revenues by approximately $6 million.

Our organic revenue guide represents a decline of 1% to 2% for the full year. We expect adjusted operating income between $779 million and $785 million, which would represent a decline of approximately 6%. On the bottom line, we expect adjusted net income between $569 million and $575 million and adjusted earnings per share between $3.51 and $3.55 for the full year 2019, which represents a decline of 3% to 4%. We expect to generate free cash flow of approximately $430 million to $450 million. This free cash flow guidance assumes annual capital expenditure of approximately $160 million to $170 million for the full year 2019.

Now I'd like to turn the call back over to Joshua.

Joshua S. Young - *Sensata Technologies Holding plc - VP of IR*

Thank you very much. Francesca, please assemble the Q&A roster.

QUESTIONS AND ANSWERS

Operator

(Operator Instructions) The first question is from Jed Dorsheimer with Canaccord Genuity.

Jonathan Edward Dorsheimer - *Canaccord Genuity Corp., Research Division - MD & Analyst*

I guess first one is for Martha and/or Jeff. I guess I'd like to dig into this new initiative to kind of migrate up the stack, if you will, and so my question is, of the personnel, what is the current headcount? And of that, what would you categorize as engineering resources? And of those engineering resources, what percent is software engineers?

Jeffrey J. Cote - *Sensata Technologies Holding plc - President & COO*

Great. Good question. So there are some skills that we've been able to use from our core business, specifically around the expertise associated with wireless sensor design. So we have reused, if you will, or redeployed a number of those resources. Headcount wise, we're talking about 90 people today with the vast majority of them being engineering, but some very important critical resources in terms of marketing and sales given the new customer base that we're engaging with.

Jonathan Edward Dorsheimer - *Canaccord Genuity Corp., Research Division - MD & Analyst*

Got it. Two more questions, if I could, or one more and then a follow-up. The -- if we look at the aerospace as a proxy for the data being generated in whether it's autonomous or ADAS, whatever the level may be that you're targeting, for vehicles or heavy vehicle and off road, an airplane will generate basically I think a gigabyte going from Boston to San Francisco, but a car will generate, in a day, over a terabyte. So you had mentioned kind of moving that data and storing it in the cloud. What is your solution in terms of dealing with the massive amount of data that would be generated in terms of this IoT strategy?

And then as a -- maybe for Martha. I was wondering if you could update on dollar content per vehicle as that was a major part of the strategy in auto, and you've always done a nice job of kind of breaking that down by region, with China kind of representing the growth engine for that. I'm wondering what's changed given the end market slowdown?

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Martha N. Sullivan - *Sensata Technologies Holding plc - CEO & Executive Director*

Yes. I'll hit both of those. The -- this is a really interesting space that we're focused on as a foray into really more of a solutions-based offering for Sensata, including data. When you look at what that customer base really needs, the data intensity is [now] in the areas that you've talked about, like aero and automotive. It's really getting algorithmic insights on what's actually happening on those vehicles and in those trailers. So the infrastructure today, when you look at telematics providers and even some of the cloud platforms that are there, is really well scaled to be able to accept that data. The challenge is the level of insight and really coming from the vehicle is not what it needs to be to keep those fleet managers happy.

Also, a little bit of a comment on the initiatives that we have. I'd say relative to content per vehicle, the progression has been quite good. As you know, we're moving rapidly on a small base in EV content, so continue to make good progress there. China continues to be the fastest content grower for us in auto, so we are well along our way of doubling that content over the past 3 years, Jed, so in really good shape there. Some of the parts of the market where we've seen content growth accelerate, GM happens to be one of those, our North America content at General Motors is quite strong. We're feeling that in the face of the strike right now. But that just ties to our clean initiatives that we have in auto as well, so we're continuing to make strong progress there.

Operator

The next question is from Wamsi Mohan with Bank of America.

Wamsi Mohan - *BofA Merrill Lynch, Research Division - Director*

In Q3, you reported revenues down 3% and adjusted operating income down 4% roughly, and your guide has revenue down 2%, but adjusted operating margin is down 10%. You might have mentioned that, Paul, a little bit about timing of comp, but I just wanted to ask you if you could address what is creating these worse incremental margins? And how much of that do you view as controllable that you can take actions on? And I have a follow-up.

Paul S. Vasington - *Sensata Technologies Holding plc - CFO, CAO & Executive VP*

I think it's all controllable, but the question is over what period of time? The biggest drop that we saw was GM, it was very abrupt. It's a significant drop. It's 3% of the automotive business, so it's significant, and so the volume drop is which is driving most of the margin degradation and we're starting to align our costs. We have been aligning our cost to the lower demand profile. But it doesn't happen instantaneously, and so we're working that very quickly and we have confidence in our ability to get our margins back up as we exit Q4 into 2020.

Martha N. Sullivan - *Sensata Technologies Holding plc - CEO & Executive Director*

And Wamsi, one other comment there. We're spending some time profiling an area where we're accelerating investments and that's a phenomena as we move sequentially as well. So the GM phenomena is ugly, but it's compressed and it's a one shot. And we're not taking our eyes off of really important growth initiatives. So that's having some impact as we move sequentially as well.

Wamsi Mohan - *BofA Merrill Lynch, Research Division - Director*

Okay. And if I could, as the street updates models here, would you say that the exit rate for 4Q is a good base to assume for modeling 2020? Seems like 4Q has some onetime negatives like GM that we just spoke about. So how should we think about seasonality, particularly into 1Q?

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Martha N. Sullivan - *Sensata Technologies Holding plc - CEO & Executive Director*

Yes. The same would -- I'm...

Paul S. Vasington - *Sensata Technologies Holding plc - CFO, CAO & Executive VP*

Yes. The seasonality is going to be the same as you -- typically Q1 is our lowest margin profile. So I would expect the seasonality or the profile for '20 to be similar to what you saw in 2019. Other than that, I would say Q4 2020, we would expect to be better just given the comments we just made about the abrupt drop out of volume this quarter.

Martha N. Sullivan - *Sensata Technologies Holding plc - CEO & Executive Director*

Yes. So to answer your question directly, no, we would not view the margin performance in the fourth quarter as sort of a reset baseline on Sensata. So we're seeing sequential movements on operating profit of 70 basis points down. That's not our normal profile as we move sequentially. So we would expect to -- as we go -- as we get through the fourth quarter and certainly as we enter into the early days of 2020.

Operator

The next question is from Deepa Raghavan with Wells Fargo Securities.

Deepa Bhargavi Narasimhapuram Raghavan - *Wells Fargo Securities, LLC, Research Division - Associate Analyst*

Martha, Paul, just tagging on that -- and Jeff too, sorry, tagging on that margin questions, strong margin, like you pointed out, Martha. This is a broader question, doesn't include GM et cetera, but more broader outlooks into 2020. Can you talk about how we should be thinking about leverage on contribution margin for Sensata in this downcast scenario, given that initial outlooks for 2020 for auto peers are coming in worse than feared. Can you talk about some of the cost actions you might have taken or are considering?

Martha N. Sullivan - *Sensata Technologies Holding plc - CEO & Executive Director*

Yes. We've already taken a number of actions. I'm going to let Paul elaborate a bit more. But we really focus in on making sure we maintain our high-differentiated margins and would expect to do that even in a decrementally down market. Now if we get into something that's extreme, it can have an impact. But we've seen an awful lot of market movement down and you can see how we're doing in the third quarter. So putting the GM strike aside, we've done a really good job of protecting our margins, and we've done that through some cost actions that we took earlier in the year. And Paul, I think you can say more.

Paul S. Vasington - *Sensata Technologies Holding plc - CFO, CAO & Executive VP*

Yes. So we -- as we mentioned in the last call, we've done a lot of restructuring in Q2. There was more restructuring in Q3. We continue to work to align our cost structure to the lower demand and really focusing on fixed cost reduction and allowing the variable cost to come down as the volumes come down in our natural discipline of managing the P&L and managing our cost structure.

Deepa Bhargavi Narasimhapuram Raghavan - *Wells Fargo Securities, LLC, Research Division - Associate Analyst*

Okay. So do these costs come back once GM -- I mean like -- GM's, I mean right now...

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Paul S. Vasington - *Sensata Technologies Holding plc - CFO, CAO & Executive VP*

No.

Deepa Bhargavi Narasimhapuram Raghavan - *Wells Fargo Securities, LLC, Research Division - Associate Analyst*

Okay. So they don't, okay. The structural strategy...

Paul S. Vasington - *Sensata Technologies Holding plc - CFO, CAO & Executive VP*

Yes. The fixed cost is not going to come back. I mean clearly, when volumes pick up, we're going to need to support that volume, but in terms of fixed cost, those fixed costs are expected to -- majority of those to go away permanently.

Deepa Bhargavi Narasimhapuram Raghavan - *Wells Fargo Securities, LLC, Research Division - Associate Analyst*

Got it. Perfect. And my follow-up...

Paul S. Vasington - *Sensata Technologies Holding plc - CFO, CAO & Executive VP*

But as Martha mentioned, we are continuing to talk -- to invest in these new growth programs, and so that will be an offsetting impact.

Deepa Bhargavi Narasimhapuram Raghavan - *Wells Fargo Securities, LLC, Research Division - Associate Analyst*

Got it. That's clear. My follow-up...

Operator

The next question is from David Kelley with Jefferies.

Unidentified Analyst

This is [Gavin] on for David. Looking at Slide 5, you noted that auto outgrowth is expected to improve in Q4. Can you talk about some of the drivers there? Is that region-specific or product-specific? And then I just have a quick follow-up.

Martha N. Sullivan - *Sensata Technologies Holding plc - CEO & Executive Director*

Yes. There are a number of drivers. And just keep in mind, we have pretty good visibility on to content growth despite the volatility in the end market. So we do have launches that are underway. So new content actually coming on vehicles despite things like the GM strike. China continues to be a very strong content performer for us. So you saw in Q3, we actually delivered organic growth in China despite a down market of about 6%, so delivering strong double-digit content growth. And that will be what continues to drive an overall performance of about 500 basis points.

Unidentified Analyst

Great. And then that content outgrowth, that content growth in China, can you just go into more detail there, too, please?

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Martha N. Sullivan - *Sensata Technologies Holding plc - CEO & Executive Director*

Yes. There are a number of things driving that growth. So one of the big ones is that we are fulfilling a requirement -- helping our customers fulfill a requirement around National VI standards. You can think of these as being analogous to Euro 6 emission standards. That's driving more sensors in simple passenger cars and also on-road trucks. So some great content there. We're seeing now the mandate around tire pressure sensing play out and that's given us nice share gains in China and additional content, and then we're just continuing to see kind of a modernization of the fleet in China. So things like sensors and climate control systems are adding content growth for us. The use of oil pressure sensors, which are pretty highly installed in mature markets, are continuing to grow in China. So some of the puts and takes.

Operator

The next question is from Dan Galves from Wolfe Research.

Daniel V. Galves - *Wolfe Research, LLC - Director of Equity Research & Senior Analyst*

Just wondering if there's anything to report on bidding activity or new business wins on electrification? And maybe more broadly, as we expect hybrid vehicles to be a big part of OEM strategies to meet CO2 targets, particularly in Europe, can you talk a little bit about your content opportunities on hybrid vehicles?

Jeffrey J. Cote - *Sensata Technologies Holding plc - President & COO*

Yes. So let me address the question on hybrid first. We've always talked about the fact that we really like a hybrid solution because it has both powertrains available on it and we can provide content into it.

With regard to the progress on the electrified platforms, we continue to see a very strong pipeline of opportunity. The acquisition of GIGAVAC has really been validated in terms of the innovation that we believe that their products bring to the market, and that's been really confirmed from our engagement with customers and as well as the broader investment case that we underwrote on that investment to help propel us from an M&A standpoint.

But we talked last quarter about the number of different initiatives, product design that we're developing, both organically and through acquisition on the electrification front and feel -- continue to feel very good about our positioning in terms of serving customers on that -- in that area.

Martha N. Sullivan - *Sensata Technologies Holding plc - CEO & Executive Director*

It's a pretty competitive market right now. So just in terms of any customer announcements, we're always a little bit sensitive to talk about where we're winning business because it's in sort of -- there is intense competition to get new platforms into the marketplace and we're enjoying those engagements.

Daniel V. Galves - *Wolfe Research, LLC - Director of Equity Research & Senior Analyst*

Okay. Great. And Paul, if you could -- you mentioned some productivity headwinds in the quarter from launches. You talked about continued investment in R&D out into 2020. And you also talked about kind of fixed cost reductions. If you kind of put those 3 things together as we look forward, do you expect costs to be lower on a year-over-year basis next year, kind of taking out the effect of kind of just general variable cost movements based on production?

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Paul S. Vasington - *Sensata Technologies Holding plc - CFO, CAO & Executive VP*

So as we look at 2020, and so we're still going through that process planning for next year just at a high level, the scaling of new products were largely behind us. What is impacting this year is the decline in a lot of our higher-margin mature products and the scaling up of these new products, which is more costly. So as those new product start to become more mature, the margin profile will improve. So the margins next year, I expect to be better as it relates to that. With the fixed cost reduction, we'll continue to drive out cost and try to align to the demand that we're seeing. We're going to continue to look, as Jeff mentioned, about increasing our investment in Smart & Connected. It's a very, very important issue for us. So too early to call to margin profile, but I would expect everything to improve, the cost to be lower relative to demand as we go into '20 and through '20.

Jeffrey J. Cote - *Sensata Technologies Holding plc - President & COO*

And it will follow that demand profile that we see from our customers. So that's the -- where the heavy lifting is being done right now to better understand the overall demand profile and what that translates to in terms of a 2020 outlook, and we'll do the work to make sure that our cost structure is aligned to that.

Operator

(Operator Instructions) The next question is from Amit Daryanani with Evercore.

Amit Jawaharlaz Daryanani - *Evercore ISI Institutional Equities, Research Division - Senior MD & Fundamental Research Analyst*

I have two questions as well. First one, Martha, on the HVOR softness, and you talked about lower customer forecast and inventory reductions as well. From your experience, how long do these corrections typically last in the HVOR market? How many quarters does that issue typically persist? And then from a content perspective, do you see your content on the HVOR side remaining stable or accelerating over the next few quarters?

Martha N. Sullivan - *Sensata Technologies Holding plc - CEO & Executive Director*

Yes. It's early innings on the market correction when we look across those end market segments. And we went back and looked at things like 2015 where we saw an overall correction. Given that, it ranges from about 4 to 6 quarters. The time of intensity has never been the same throughout every cycle, so some start very intensely, and other sort of build momentum. So not sure I can provide a lot of visibility on that -- what that can look like.

The thing that's impacting content growth now, and we think stabilizes as the correction gets underway, is that you're seeing delays in new equipment coming into the market as these customers are trying to actually consume older equipment that has less of the content. So as those inventories come down, we would expect to see content restored, and at the same time, we have growth programs that we would expect to see improve the overall equipment take rate.

Amit Jawaharlaz Daryanani - *Evercore ISI Institutional Equities, Research Division - Senior MD & Fundamental Research Analyst*

Got it. That's really helpful. And if I could just follow up with Paul. Paul, the free cash flow conversion was fairly impressive, I think high 90% in Q3. My math suggests it remains high, in the high 90% again in Q4 as well. Hopefully that's right.

Paul S. Vasington - *Sensata Technologies Holding plc - CFO, CAO & Executive VP*

That's right.

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Amit Jawaharlaz Daryanani - *Evercore ISI Institutional Equities, Research Division - Senior MD & Fundamental Research Analyst*

I'm wondering is this something onetime in nature that's helping this high free cash flow conversion in the back half. Or is this something structural that we should start to think about as we model longer term numbers in free cash flow for you guys?

Paul S. Vasington - *Sensata Technologies Holding plc - CFO, CAO & Executive VP*

If you saw, last year, it was similar -- kind of similar where the second half had stronger cash flow conversion than the first half. But what we're seeing is very strong execution around reducing past dues on the receivables. Past dues had very good collections in Q3. We continue to work our inventory to streamline our inventory -- work our inventory levels down, improve our terms and conditions of the suppliers. So driving better working capital efficiency is a process improvement initiative we've had for a while, and you're seeing the results of that. But the seasonality is relatively the same where the second half is typically stronger in terms of conversion.

Operator

Next question is Samik Chatterjee with JPMorgan.

Bharat Daryani - *JP Morgan Chase & Co, Research Division - Analyst*

This is Bharat on for Samik. So my first question relates to the aerospace end market. And can you give us a sense of what trends are you seeing in end market? You have been reporting very strong organic growth numbers there. So how sustainable is the trend as we particularly move into 2020? Is it more a function of favorable end market in general or more content growth for Sensata? And just as a quick follow-up, can you also give us an update of how much restructuring remains to be undertaken in the fourth quarter?

Jeffrey J. Cote - *Sensata Technologies Holding plc - President & COO*

So why don't I hit the aerospace one and then Paul can hit the second part of the question. So aerospace is one of these end markets that has the luxury of a very long lead time around the booked business. And so I suspect that many of you are tracking the aerospace industry in the 8- to 10-year backlog of orders that are out there. So that provides for some very, very long visibility into the revenue stream that we would have associated with that. We also have similar pipeline around content growth for new products that we're launching into that space that we have high visibility to as well. So the combination of the very long cycle and the visibility gives us a pretty good look. We track a number of metrics, cancellation of orders, which there has been some, but not anything that would cause anybody to be alarmed regarding that backlog of business, and we also watch things like passenger miles and so forth to really gauge the health of the overall industry. And we're seeing that be -- continue to be quite resilient despite some of the challenges associated with grounded aircraft and so forth.

Martha N. Sullivan - *Sensata Technologies Holding plc - CEO & Executive Director*

At the same time, we have been able to bring new content into that growth rate. So you're seeing a combination of the strong end market as well as content.

Paul S. Vasington - *Sensata Technologies Holding plc - CFO, CAO & Executive VP*

So you mentioned restructuring. So in the third quarter, we did have more restructuring action. We consolidated a site in Germany, and we continue to reposition transformation initiatives within our current existing sites. And I expect this activity to continue given the weak end market demand that we're seeing.

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Operator

The next question is from Joseph Giordano with Cowen.

Robert G. Jamieson - *Cowen and Company, LLC, Research Division - Research Associate*

This is Robert in for Joe. I just had a quick question. As we head into 2020, which end markets do you think are most at risk next year versus your current expectations? And then I have a quick follow-up after that.

Martha N. Sullivan - *Sensata Technologies Holding plc - CEO & Executive Director*

Yes. I think, as Paul mentioned earlier, we're doing a lot of work to try to understand the landscape for 2020. So I want to be very careful to tell you that these are preliminary thoughts at best. I think when we think about what's at risk going forward, we're looking at where we're already seeing quite a bit of contraction. And so we're beginning to recognize that things like China PMI are stabilizing it, but unfortunately, it's still a contraction rate. So probably not a risk of accelerated declines like we've seen, but we don't see recovery, at least in the first half of the year most likely.

The one end market that we've not seen have a lot of correction is North American auto. So the GM strike notwithstanding, that's a market that has been operating, I think, above expectations, slightly down, but above expectations. So that's another area we're watching quite closely.

When we look at the balance of our end markets, our HVOR segment is definitely in correction territory and will probably remain there as we move into 2020. So don't expect a surprise, but definitely not counting on an improved outlook for a good portion of 2020. So those are very preliminary thoughts. We would encourage everybody to do their work on those end markets themselves, but those are the ones that affect Sensata.

Robert G. Jamieson - *Cowen and Company, LLC, Research Division - Research Associate*

Okay. Perfect. And then my follow-up would be, just have you seen any sequential bottoming or sign of a sequential bottoming within the industrial end market?

Martha N. Sullivan - *Sensata Technologies Holding plc - CEO & Executive Director*

For us, what we see in that particular end market, just given where we operate in the supply chain, we see an awful lot of inventory takeout. And while that occurs, our conclusion is that it has -- it has not yet sort of stabilized. So we'll be watching that one closely, but that's one of the phenomena that's affecting our reguide in the fourth quarter.

Operator

The next question is from William Stein from SunTrust.

William Stein - *SunTrust Robinson Humphrey, Inc., Research Division - MD*

I'd like to follow up on the investment in Smart & Connected. I think most of us are aware that the initial foray into this market is from Schrader and acquisition. And now there's organic investment. It would seem that there may be opportunities for M&A in this area to broaden and deepen the portfolio. Should we anticipate this as an M&A focus area of the company?

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Paul S. Vasington - *Sensata Technologies Holding plc - CFO, CAO & Executive VP*

Well, certainly, as you pointed out, a major element of the foundation of this did come originally through an M&A activity. And at the time of that, when we acquired Schrader, we knew there would be more opportunities for use of wireless sensing. We do have a healthy pipeline. Smart & Connected and Electrification are among that pipeline in terms of opportunities. So we will continue to look at it.

I think it's important to note also that it's not just the wireless capability that was brought to us in terms of the ability to serve this new segment, it's also the strong position we have with our core HVOR business, and it's the tough-to-do applications that can be converted into a wireless capability to bring it to this vehicle area network solution. So it's a combination of those organic and inorganic to really bring this to market into where it is today.

Martha N. Sullivan - *Sensata Technologies Holding plc - CEO & Executive Director*

I think that the one thing you can really count on is that when we do acquisitions, they are very much aligned to our strategy. You've seen that in electrification with the GIGAVAC acquisition. You look at our acquisition of Schrader, very much tied to the sensor strategy. So to the extent that you're understanding our strategy, and we appreciate the work that folks do to do that, you'll not be surprised by the acquisitions we make.

William Stein - *SunTrust Robinson Humphrey, Inc., Research Division - MD*

Okay. Appreciate that color. One more, if I can. There've been other -- one acquisition recently, GIGAVAC, you provided a little bit of color a minute or 2 ago. But if you could maybe go a little deeper as to traction with the products coming out of that business and sort of as it's developed a little bit more of a standalone business relative to the way you've typically integrated these much more, well, much more completely, let's say, as opposed to letting acquisitions stand alone. So an update there? And then also the partnerships with Quanergy and Lithium Balance, any update on those would be helpful.

Martha N. Sullivan - *Sensata Technologies Holding plc - CEO & Executive Director*

Yes. So we'll tag team this a bit. They're really important topics inside Sensata. Just to put the frame around what's happening at GIGAVAC. The engineering expertise, the technical expertise that we acquire with that business is really important, but we already have highly commingled technical teams. So we've staffed from legacy Sensata into California where the Electrification team sits, the contactor team sits. We've already launched manufacturing inside core Sensata sites in China and in Mexico, for example, and that's all about expanding our position in the automotive market. So things are progressing quite well. We've had some wins and some design-ins that would not have happened for standalone GIGAVAC, just given our ability to engage globally with auto and industrial customers as well. So I think nice progress there.

Not a lot to say about Quanergy. We see the overall level 4, level 5 autonomous driving opportunity really pushing out there. And so as we think about the pace of our investments, that's an area where we probably turned down a bit versus where we've been in the past. And Jeff, you want to say anything?

Jeffrey J. Cote - *Sensata Technologies Holding plc - President & COO*

Yes. On the Lithium Balance side, we spoke a fair amount on the last call regarding this topic in terms of not only Lithium Balance, but the other organic activities that we've been undertaking, wireless battery management and so forth, and how they fit together to form what is Sensata's Electrification strategy. More to be done there, but we feel really good about the progress and the integration, which varies depending on the partnership or the acquisition that we're talking about, to optimize for the outcome rather than having a one-size-fits-all. And it's been really good progress in terms of Lithium Balance and the engagement that we've had with our customers and the help that is provided to us in terms of our continued progress on Wireless Battery Management. So good progress there.

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Operator

The next question is from Craig Hettenbach with Morgan Stanley.

Craig Matthew Hettenbach - *Morgan Stanley, Research Division - VP*

Yes. Just a question on kind of operating margin, just thinking longer term. In particular, Jeff, as you kind of laid out some of the growth initiatives, should we think of -- is there any kind of reallocating of resources or just kind of within what footprint you're expected to kind of invest to drive margins longer term?

Jeffrey J. Cote - *Sensata Technologies Holding plc - President & COO*

Yes. That's a great question. So to date, we've talked about the fact that we've been investing in the Smart & Connected initiative for about 18 months to 2 years already. And it's been a sizable investment, it's been in the $15 million range per year that we've been invested in. We've done that by doing exactly what you've just said. We've reallocated investments to where the biggest opportunities are long-term for Sensata.

I think the question that Martha was sort of getting at when she talked about the frame there, is there may be a point in time where we need to invest incrementally and we'll speak to that and we'll call it out. We're not talking about huge amounts of money here, but the example we gave is we want to double down, if you will, double the investment on Smart & Connected as the proof points continue to come in. That's the kind of range to be thinking about to help transform as well as what other people have mentioned around some of the inorganic activity that we might be able to do there.

Craig Matthew Hettenbach - *Morgan Stanley, Research Division - VP*

Got it. And then just a follow-up question for Martha. I appreciate the color on kind of the macro and end markets, but -- and as you said, none of these cycles are the same in terms of how they play out. But just the recent deterioration or inventory adjustments in heavy vehicle and industrial, any other signals you're seeing from the customers in terms of where they are in terms of the progress to kind of realign inventory to lower demand?

Martha N. Sullivan - *Sensata Technologies Holding plc - CEO & Executive Director*

Yes. I would say not much beyond what I've already described. There's generally a phenomena of us keeping a really tight eye on what's happening with their orders to the extent that we can and then with production. And usually, it's more what they do versus what they say. So our call-offs will often reflect what we can expect to see in terms of inventory takeout on both their end and also in our own component level inventory. So those are the things that we look at.

Operator

The last question is from Jim Suva with Citi.

Jim Suva - *Citigroup Inc, Research Division - Director*

I believe it was either Martha or Jeff mentioned an inventory correction in HVOR takes about 4 to 6 quarters, if I heard that right. So does that put us basically exiting 2020, assuming demand doesn't get much, much worse, but exiting 2020 is likely the equilibrium for much better growth? And I think that was for HVOR, the comment.

And then on the auto side, was there inventory we have to think about working through that? And how long should that take? I know you mentioned the GM strike a lot on the auto side, but I was curious about the inventory.

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Martha N. Sullivan - *Sensata Technologies Holding plc - CEO & Executive Director*

Jim, it's Martha. Yes, I was responding to a question around how long do we -- does it generally take the HVOR market to cycle. So that was less about inventory takeout relative to those end markets than just studying past corrections in those end markets and how long do they take to play out. That was what the sort of 4 to 6 quarter phenomena I described. And there's outliers on either side of that. So it's information that's probably available for everybody to do their homework on.

On the auto piece, so yes, in addition to that correction, we're seeing inventory correction on top of end order rates.

On the auto side, the vehicle inventory is more visible. Generally speaking, the industry is in control on vehicle inventory given the GM strike, actually North America is quite low, GM is quite low right now in vehicle inventory and they will be trying to build that back. And there's much less component level inventory in the overall supply chain. So the places we have to keep our eye on in terms of inventory corrections are in Europe. That's -- we're expecting more -- some of that as we get into the fourth quarter. That's some of the thinking that's in our guide as well.

Operator

This concludes the time we have allotted for today's call. I'd like to now turn the call back over to Joshua Young for closing remarks.

Joshua S. Young - *Sensata Technologies Holding plc - VP of IR*

I'd like to thank everybody for joining us this morning. Sensata will be attending the Robert Baird Industrial Conference in Chicago next week as well as the Cowen Industrial & Technology Summit on November 19 in New York. We invite you to visit us at these conferences or our headquarters in Attleboro, Massachusetts. Thank you for joining us this morning and for your interest at Sensata. You may now end the call.

Operator

Conference call has now concluded. Thank you for attending today's presentation. You may now disconnect.

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